

Claims

1. A lamp comprising:
 - (i) an elongate watertight housing having first and second ends and at least one sidewall;
 - (ii) at least one light source within the housing and arranged to emit light from the housing;
 - (iii) a port in the housing to allow ingress of water when the lamp is submerged in water;
 - (iv) a heat-dissipating element having an elongate heat dissipating body extending into the housing to dissipate heat generated by the light source, the body having defined therein an internally located conduit which is in fluid communication with the port in a watertight arrangement so that when the lamp is submerged, water ingressing through the port flows internally into the heat dissipating body via the conduit so that the heat dissipating element is cooled by internally circulating water.
2. A lamp as claimed in claim 1 wherein the heat-dissipating element terminates within the housing.
3. A lamp as claimed in claim 2 wherein the conduit terminates in a blind end.
4. A lamp as claimed in claim 1 wherein the conduit of the heat-dissipating element is in fluid communication with at least two ports in the housing so that water may enter or exit the heat-dissipating element through either port.
5. A lamp as claimed in any preceding claim wherein the heat-dissipating element is centered in said housing.

6. A lamp as claimed in any preceding claim wherein said heat-dissipating element comprises an elongate hollow metal tube in fluid communication with at least one port in the housing.

7. A lamp as claimed in any preceding claim wherein the at least one sidewall is an endless sidewall.

8. A lamp as claimed in any preceding claim wherein the at least one sidewall of the elongated watertight housing is constructed of transparent material.

9. A lamp according to any preceding claim wherein the housing comprises:

- (a) a unitary body which has a first open end; and
- (b) a closure for the open end.

10. A lamp according to any preceding claim wherein the housing comprises:

- (c) a unitary body which has first and second open ends; and
- (d) a closure for each open end.

11. A lamp according to claim 9 or claim 10 wherein the port is provided in a or each closure.

12. A lamp as claimed in claim 9 or claim 10 wherein a or each closure carries at least one electrical connector for connecting an electrical cable from an external power source to the light source.

13. A lamp as claimed in any of claims 9 to 12 wherein a or each closure is removable from the housing to allow access to the light source within said housing.

14. A lamp as claimed in any preceding claim wherein the closure at the base of the elongate watertight housing comprises a mounting base.

15. A lamp as claimed in claim 14 wherein said mounting base has internal and external sides and the lamp can stand on the external side.

16. A lamp as claimed in any preceding claim wherein the light source is mounted proximate to the heat-dissipating element.

17. A lamp as claimed in claim 16 wherein the light source is connected to the heat-dissipating element by means of a heat conductive connector.

18. A lamp as claimed in claim 16 or claim 17 wherein the heat conductive connector is a metal connector.

19. A lamp as claimed in any preceding claim wherein the light source comprises at least one halogen bulb.

20. A lamp as claimed in any preceding claim wherein a ballast weight is contained inside the watertight housing.

21. A lamp as claimed in claim 20 wherein the ballast weight is arranged on or in the mounting base.

22. Use of a lamp according to any one of the preceding claims for the purpose of promoting growth of photosynthetic plants and organisms for feeding fish.

23. A fish farm comprising a lamp according to any one of claims 1 to 21.